In the Claims:

Please amend claims 1-37 as follows:

1. (Previously Presented) An isolated or substantially pure form of a nucleic acid molecule encoding a human 5-$HT_{4(h)}$ receptor wherein the nucleic acid is capable of hybridising to the molecule of claim 1 or the complementary sequence thereto under conditions of high stringency.

2. (Previously Presented) The nucleic acid molecule of claim 1 encoding a human 5-$HT_{4(h)}$ receptor comprising the amino acid sequence of SEQ ID NO:2 or encoding a functional equivalent, derivative or bioprecursor of said receptor.

3. (Previously Presented) The nucleic acid molecule according to claim 1 which is a DNA molecule.

4. (Previously Presented) The nucleic acid molecule of claim 3, wherein said DNA molecule is a cDNA molecule.

5. (Previously Presented) A nucleic acid molecule according to claim 2 comprising SEQ ID NO:2.

6. Cancelled.

7. (Previously Presented) A human 5-$HT_{4(h)}$ receptor encoded by the nucleic acid molecule [according to any] of claim[s] 1 [to 5].

8. (Previously Presented) A DNA expression vector comprising a nucleic acid molecule of claim 3.

9. (Original) A host cell transformed or transfected with the vector of claim 8.

10. (Previously Presented) The host cell according to claim 9, which cell is a mammalian cell.

11. (Previously Presented) The host cell according to claim 10, which mammalian cell is a COS-7 cell.

12. (Withdrawn) A transgenic cell, tissue or organism comprising a transgene capable of expressing a human 5-$HT_{4(h)}$ receptor protein comprising the amino acid sequence of SEQ ID NO:2 or an amino acid sequence of a functional equivalent, derivative or bioprecursor of said receptor.

13. (Withdrawn) A transgenic cell, tissue or organism according to claim 12 wherein said transgene comprises a nucleic acid molecule according to claim 1.

14. (Currently Amended) A human 5-$HT_{4(h)}$ receptor protein or a functional equivalent, derivative or bioprecursor thereof, [expressed by the cell of claim 9 or the cell tissue or organism of claim 12] encoded by the nucleic acid of claim 1.

15. (Original) A HEK 293 or COS-7 5-$HT_{4(h)}$ cell line transfected with the expression vector of claim 8.

16. (Withdrawn) An antisense molecule comprising a nucleic acid molecule which is capable of hybridising to the nucleic acid of claim 1 under conditions of high stringency.

17. (Withdrawn) A pharmaceutical composition comprising a molecule according to claim 16 together with a pharmaceutically acceptable carrier, diluent or excipient therefor.

18. Cancelled.

19. (Previously Presented) A purified or isolated human 5-$HT_{4(h)}$ receptor protein comprising the amino acid sequence of SEQ ID NO:2 or the amino acid sequence of a functional equivalent, derivative, fragment or bioprecursor of said sequence.

20. (Original) A pharmaceutical composition comprising a molecule according to any of claims 1 to 5 together with a pharmaceutically acceptable carrier, diluent or excipient therefor.

21. (Withdrawn) An antagonist or an agonist of a ligand of the human 5-$HT_{4(h)}$ receptor protein of claim 14.

22. (Withdrawn) A pharmaceutical composition comprising an antagonist or an agonist according to claim 21 together with a pharmaceutically acceptable carrier, diluent or excipient therefor.

23. (Previously Presented) A method of determining whether a compound is an agonist or an antagonist of a ligand of a human 5-$HT_{4(h)}$ receptor, which method comprises contacting a cell transformed or transfected with an expression vector capable of expressing said receptor with said compound in the presence of said ligand and monitoring cAMP formation in said cell, wherein a change in cAMP formation in the cell identifies the compound as an agonist or an antagonist.

24. (Previously Presented) The method of claim 23 wherein said cell is a human cell.

25. (Previously Presented) A method of determining whether a compound binds to a human 5-$HT_{4(h)}$ receptor which method comprises contacting a cell, or a membrane preparation from the cell wherein the cell was transformed or transfected with an expression vector capable of expressing said receptor, with said compound and determining the binding affinity of said compound for said receptor.

26. (Withdrawn) A compound identifiable as an agonist or antagonist according to the method of claim 24.

27. (Withdrawn) A compound according to claim 26 for use as a medicament.

28. (Withdrawn) The method of claim 36 wherein the method is used to treat a subject in need of a medicament for the treatment of any of heartburn, reflux, esophagitis, Barrett's esophagus, esophageal cancer, achalasia, esophageal stenosis, esophagel spasms, esophageal hiatal hernia or other esophageal motility disorders, oesophageal irritation, such as asthma, bronchospasms, aspiration and other diseases of the lower oesophageal sphincter, or achalasia; oesophageal stenosis or compression, oesophageal spasms or other oesophageal motility disorders, asthma, irritable bowel syndrome, bronchospasms and other airway disorders including those associated with oesophageal irritation aspiration; hiatus hernia; denervation of the oesophagus, or disturbances in oesophageal innervation.

29. (Withdrawn) A pharmaceutical composition comprising a compound according to claim 27 together with a pharmaceutically acceptable carrier diluent or excipient therefor.

30. (Previously Presented) An antibody specific for a human 5-$HT_{4(h)}$ receptor according to claim 7.

31. (Previously Presented) A kit for determining whether a compound is an agonist or an antagonist of a 5-$HT_{4(h)}$ ligand, which kit comprises a cell according to any of claim 9, means for contacting said compound and said ligand with said cell and means for measuring camp formation is said cell.

32. (Original) A kit according to claim 31 wherein said cell is a COS-7 cell.

33. (Previously Presented) A pharmaceutical composition incorporating the nucleic acid sequence according to claim 1, or the antibody according to claim 30, together with a pharmaceutically acceptable carrier, diluent or excipient therefor.

34. (Previously Presented) A method of identifying a ligand for 5-$HT_{4(h)}$ receptor, which method comprises contacting a cell expressing said receptor with said compound to be tested and monitoring the level of a 5-$HT_{4(h)}$ mediated functional or biological response.

35. (Withdrawn) A compound identifiable as an agonist or antagonist according to the method of claim 25.

36. (Withdrawn) A method of altering cAMP production in a cell using an agonist or an antagonist of a human 5-$HT_{4(h)}$ receptor, the method comprising the step of exposing the cell to a compound that binds to a human 5-$HT_{4(h)}$ receptor.

37. (Withdrawn) The method of claim 28 wherein the method further includes bronchitis, (broncho)pneumonia, bronchiectasia, oesophageal stenosis due to systemic sclerosis, tumours, or burns, bronchitis, pneumonia, bronchiectasia.